

**ABSTRACT**

Disclosed herein is a heater module of a rapid thermal processing apparatus. The heater module comprises a heater reactor provided with reflectors, lamps, a cooling gas inlet unit, a quartz window, a quartz window fixing unit, and a cooling gas outlet unit. According to the present invention, since the lamps, reflectors and the like provided in the heater module are cooled during or after thermal processing steps, it is possible to maintain smooth operation thereof, to extend its usage life, and to reduce a preparation time of thermal processing steps. Further, as the respective reflectors adopt an independent structure for allowing the respective lamps to be installed therein in a one-on-one fashion, it is possible to achieve accurate control of a heating source. Furthermore, the lamps adopt a structure capable of effectively reflecting light emitted therefrom, resulting in an improvement in a thermal efficiency.